

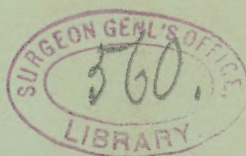
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INSURED LIVES
AS AFFECTED
BY
GOUT

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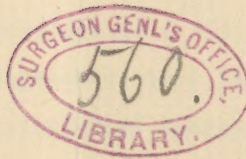


PUBLISHED BY
THE MUTUAL LIFE INSURANCE COMPANY
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1895

WITH THE COMPLIMENTS OF
The Mutual Life Insurance Company of New York

Richard A. M. Lundy
President.

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The Mutual Life Insurance Company of New York,
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PRESIDENT'S OFFICE,
THE MUTUAL LIFE INSURANCE COMPANY
OF NEW YORK.

By reason of its age, magnitude and varied experience the records of The Mutual Life Insurance Company of New York are of especial value to all persons interested in approved scientific methods of conducting the business. It has always been the object of the Company by its publications and compilations to freely give to all its fellow workers the advantage of its experience in all branches.

In accordance with this practice the present paper is submitted, giving the result of investigations on the part of the Medical Officers of the Company with a view to ascertain the effect of Gout upon the longevity of insured lives. Subsequent pamphlets of a similar character will be issued, giving the statistics and inferences as to the like effect of other constitutional diseases.

RICHARD A. McCURDY,

President.

April 30th, 1895.

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GOUT.

RICHARD A. McCURDY, ESQ.,

President.

Sir:

At the suggestion and request of the General Manager I have read the report of the Actuary on the experience of the Company with gouty persons, and have carefully considered the medical aspect of the subject. His records show that forty-eight (48) gouty persons have been insured in this Company between 18⁴~~8~~3 and 1888, and that from these risks the pecuniary loss to the Company has been four times greater than what he considers the normal loss should have been. He has subdivided the risks according to duration of the insurance, the ages of the insured, the proportionate height and weight of the insured, and the date at which they were accepted, and in all these divisions finds the same extraordinary increase of loss, and the presumption remains that this increased mortality is due to the fact that the lives of the insured

were deteriorated and shortened by their gout. The number of cases is too small to admit of much generalization, and therefore I have carefully gone over each individual case to see whether this view would be sustained, or whether there were any other circumstances which might account for the loss. Gouty persons have always been looked upon as poor subjects for insurance, and medical opinions are almost unanimous that gout tends to shorten life in the great majority of cases, while recognizing the fact that, exceptionally, they reach to a very advanced age. The action and rules of The Mutual Life have always been in accordance with this medical opinion, and it was only in exceptional cases that anyone was accepted who had a gouty record. No Medical Examiner, however, would say that every person who might have ever had the slightest possible symptom of gout should be always uninsurable, and therefore, in a few exceptional cases, they have recommended the issuance of policies. How carefully this selection has been made, and how few such cases have been insured, appears from the report of the Actuary, that, up to the end of the year 1887, when over 300,000 policies had been issued, only fifty-eight (58) policies have been issued to forty-eight (48) persons in whose applications was any statement indicating a history of gout. These forty-eight (48) cases were undoubtedly considered the exceptional cases of gout that were safely insurable, and yet their acceptance

has proved to have been very unfortunate for the Company. Most of these applicants were residents of our large cities, examined by skillful Examiners, and many of them seen by the Examiners of the Home Office.

The Actuary's figures of the Company's experience and loss are given from the pecuniary amount at risk and subsequent loss, rather than from the number of lives, and as this experience is very limited and consequently liable to error, I have considered and examined the cases as lives rather than by policies. A few accidental losses from lives with a large amount of insurance might easily lead to erroneous conclusions. As an instance in point, the Actuary has divided the risks by a definite period: those insured before 1872 and those after that date; in both these periods the loss is very excessive; in the latter, he states that the normal loss should have been \$10,000, while the actual loss was \$40,000. Now we find that from 1872, eighteen (18) lives were insured in amounts ranging from \$1,000 to \$30,000. Of these eighteen (18) persons two died, and both held large policies, one \$30,000, the largest policy that had ever been issued to a gouty subject; the other had \$10,000 in two policies. Death had struck the largest policy-holders. The mortality might have been greater than it actually was and the loss less than normal. Moreover, the first (\$30,000) was an unfit subject for insurance, and died from disease induced by his intemperate habits, three years after insurance. The

circumstances connected with his life were concealed from the Company at the time of his insurance, and were only ascertained on investigation after his death. In the second case (\$10,000), there is uncertainty as to whether the applicant had ever had gout at all, although it was so reported at first. The matter was not entirely cleared up, but the applicant was accepted after consideration by the Medical Department at the Home Office, on the certificate of his family physician that he had never *known* of his having had the disease. He died of acute pneumonia of two days' duration.

Of the forty-eight cases reported by the Actuary, I think that four should be omitted, as one was evidently reported as gouty by mistake and the other three had never had any acute attack of gout, and the total number is thus reduced to forty-four. The history of the insurance in these cases, from the time of the first report of the existence of gout until they ceased to be members of the Company, is as follows: Subdividing them according to the dates at which they were insured, of those

Insured from

1843 to 1858.		1858 to 1872.		1872 to 1887.	
Lapsed	- - 2	Forfeited	- 1	Forfeited	- 1
Forfeited	- 4	Surrendered	2	Surrendered	1
Surrendered	- 3	Died	- - 9	Died	- - 2
Died	- - 4	In force	- 1	In force	- 14
<hr/>		<hr/>		<hr/>	
Total	- - 13	Total	- - 13	Total	- - 18

In the first of these periods four policies were issued for a term of a few years only and expired by limitation or were forfeited, presumably when they had effected the temporary insurance which was intended. The other two periods do not include any of these term insurances and may be taken together with the remark that naturally there are more deaths and fewer policies remaining in force among those issued before 1872, owing to the lapse of time. Attention is especially called to the very small number of those who have forfeited or surrendered their insurance; of the thirty-one insured only two have forfeited, and three surrendered their insurance. I understand that this is far below the usual experience, and it may best be explained by the very circumstances that the persons are gouty and appreciate the fact that their lives are unsound, and it is therefore important for them to keep up their insurance, and the apprehension that if their policies should be terminated it would not be easy for them to secure others. Of the forty-four cases insured fifteen have died, a mortality of thirty-four per cent., which far exceeds that of the Company's experience in general. These fifteen deaths are too few to generalize upon, and must be examined individually. The table on the following page shows a synopsis of the important facts in each case:

No.	Age at Insurance	Age at Death	Duration of Insurance	Cause of Death	Remarks
1	39	47	8.5	Dropsy.	In subsequent examination still reported as having rheumatic gout.
2	39	50	10.9	Heart disease.	
3	58	67	9.1	Dropsy.	
4	39	69	30	Apoplexy.	
5	34	35	1.7	Gout.	Application states that he had gout in foot about five years ago. Temperate and active in habits.
6	67	74	6.4	Pneumonia.	Gout in toes about four years ago; none before or since. Was subsequently examined and insured, and no mention is made of gout.
7	40	57	17.4	Tumor of liver.	
8	48	64	16	Heart disease.	Endowment at 65 years. Ten payments.
9	43	52	9.2	Heart disease.	Had rheumatic gout before nineteen years of age. None since.
10	53	74	21.9	Heart disease.	About eight years ago thinks he had something like gout; was never laid up with it.
11	48	55	6.5	Pneumonia.	Ten year endowment.
12	34	49	14.3	Bright's disease and rheumatic gout.	
13	50	57	6.10	Pneumonia.	Death certificate mentions as other diseases asthma and gout. Father had gout. Ten year endowment advised.
14	50	54	3.3	Bright's disease.	
15	60	62	1.11	Pneumonia.	

Gout usually makes its appearance in the fourth or fifth decade of life, though we find exceptional cases originating earlier or later. Five of these cases were insured when between 30 and 40 years of life, and among them we have both our worst and our best experiences. Two insured at 34 years of age died directly from "the effects of gout," as stated in the death proofs. Another insured at 39 lived 30 years, thus surpassing his expectancy of life. Two were insured when above 60 years of age. Neither reached their expectancy, or proved good risks to the Company, although in both cases there was little history of gout. Two cases only reached to 70 years of age; one of them was insured at the age of 67 and died at 74, after less than seven years of insurance; the other was insured at 53 and died at 74, with a duration of insurance of 21 years, 9 months, which was more than the expectancy. The duration in these cases was as follows:

Under 5 years	-	-	-	-	-	3
5 to 10 years	-	-	-	-	-	6
10 to 20 years	-	-	-	-	-	4
Above 20 years	-	-	-	-	-	2
						<hr/>
Total	-	-	-	-	-	15

Examining the causes of death, we find

Gout	-	-	-	-	-	2 cases.
Heart disease	-	-	-	-	-	4 cases.
Bright's disease	-	-	-	-	-	1 case.
Dropsy	-	-	-	-	-	2 cases.

Apoplexy	-	-	-	-	-	1 case.
Acute pneumonia		-	-	-	-	4 cases.
Tumor of liver	-	-	-	-	-	1 case.
						—
Total	-	-	-	-	-	15 cases.

In two cases gout is described as the cause of death, but it is well recognized that diseases of the heart, and of the kidneys, dropsy, and apoplexy frequently result from gout and are the immediate cause of death in gouty subjects.

On examining carefully each individual case, it is sometimes impossible to prove, and difficult even to suspect, that the gout had any influence whatever in hastening death. In the majority of cases, however, it not only appears probable, but may be reasonably inferred, that the fatal disease and premature death were directly due to the gouty diathesis. A very careful study of the cases fails to show any other apparent cause for the excessive mortality.

The Actuary's report has shown that the actual loss from these gouty persons has been excessive. If they had been perfectly sound lives there would have been some deaths, and some loss, but in addition to these there have been other deaths, two of them directly attributed to gout, and several others in which the influence of gout was considered proved. Moreover, these persons recognize the fact that their viability is impaired and the chances of

average longevity diminished, and, consequently, seldom surrender or forfeit their policies, thus making a selection against the Company.

The Company's total experience is small, too small to establish general conclusions, and we would hesitate now to ascribe this increased loss to gout, and would consider that it might be the result of coincidences rather than cause and effect, were it not that our conclusions are borne out by the judgment of the physicians and the experience of other life insurance companies which have had more risks of this class. Of medical opinions I will give a few quotations from the most recent authorities:

"The outlook for a gouty patient is hardly ever favorable.

"Commonly the course of the disease is ever a downward one, and may be cut short at any period by the rapidly coming organic degenerations, or by many of the accidental intercurrent maladies to which these patients seem especially liable.

"The earlier in life gout makes its appearance, the more unfavorable it is for the subject."—*Longstreth, on Rheumatism and Gout, p. 254.*

"That gout shortens life in the majority of cases is unquestionable. The prognosis varies with the rapidity with which the constitutional dyscrasia is developed, and

this rapidity will depend on the intensity of the inheritance and the mode of life. Some gouty subjects escape the vascular and visceral complications of the disease for a long period, although crippled and deformed by its articular ravages, and attain advanced age; others may succumb in comparative youth to its most profound lesions." *W. H. Draper in Pepper's System of Medicine, Vol. 2, p. 127.*

"Gout has a decided tendency to shorten life and insurance companies, being fully aware of the fact, are not backward in acting upon it by increasing the amount of premiums for the insurance of the lives of those who have suffered from this disease. Gouty patients sometimes live to a good old age, and occasionally in the latter part of their lives the fits become milder and less frequent. Examples prove the liability of gouty subjects to be suddenly cut off by comparatively slight accidents. I consider that even a single fit of gout, however slight, should be looked upon as an intimation that the patient cannot go on with impunity with his present habits of life; it is a warning that either he must change them, or expect returns of the disease which as time advances are certain to increase both in frequency and duration and are likely to embitter and shorten existence."—*A. B. Garrod, Treatise on Gout and Rheumatic Gout.*

Sir Dyer Duckworth, in his recent "Treatise on Gout," has a chapter on Life Assurance. He says that

each case must be carefully considered by itself, but the question in his mind seems to be how far such risks are impaired, and at what extra rates they should be valued in accordance with the practice of English Life Insurance Companies. In "The Medical Handbook of Life Assurance," by Dr. Pollock and Mr. Chisholm, it is said that the tendency has been in past years to under-estimate the importance of extra risk arising from gout.

British Life Insurance Companies are accustomed to insure gouty subjects, charging such extra rate as may be deemed proper for each case, generally an advance of about 10 per cent. The Actuary has quoted Mr. Meikle as stating that "the mortality on lives charged extra for gout is greatly in excess of that for any other infirmity." I find, also, a "Report on Gouty Lives," drawn up in 1879 by the Actuary and Medical Officer of the Equity and Law Life Office. This Company had an experience of seventy-three cases in which an extra premium for gout had been required: "Had these been healthy lives, and accepted at the ordinary rates, the deaths 'expected' and allowed for at the tables would have been thirteen. But, at the ages at which they were rated at the office, sixteen or seventeen deaths were allowed for. The number of deaths which actually occurred was twenty-one. Of the twenty-one cases not one, even at the 'Office ages,' reached the calculated expectancy, although a few nearly reached

it. So that in these, the most favorable cases in the list, it is fair to assume from this point of view that the gouty constitution was instrumental in shortening life. This general survey confirms strikingly the conclusion to which the figures point, viz.: that gout adds so seriously to the risk of premature death, that undoubted cases of the disease, or even those in which there is distinct reason to suspect its existence, ought not to be accepted at ordinary rates, or with so small an addition as three or five years as has hitherto been customary." The experience of the Equity and Law Life Office shows that an extra rating of 10 per cent. in all cases of gout is not sufficient to cover the risk, and it is suggested that a rating of 25 per cent. would be a proper rule. In a postscript to the paper the following addition is made: "Since writing this paper, I have seen the results of a similar investigation, made to test my conclusions, into the gout class of another Assurance Society, where the number of cases was 321 (the years of observed life were 3984.5, or 12.4 on the average of each case), and the deaths 183. The experience derived from this body of facts, though less adverse than those given above, is strongly confirmative of my conclusions, both as to the need of a substantial increase of premium—probably not less than 20 per cent.—and as to the close connection between the causes of increase and the causes of death."—*Dr. E. Symes Thompson, Med. Times and Gazette, 1879, Vol. 1, p. 611.*

Judging, then, from the opinions of the most experienced physicians, and from the results obtained in the British companies which insure many gouty persons at higher rates, and from the experience of our own Company in a few selected cases, the insurance of persons with a gouty history and constitution is always hazardous, and even more hazardous than has been generally supposed. The rule of the Company's practice should be, as it has hitherto been, that such persons are uninsurable at ordinary rates and on the plain life plan. If exceptions are made to the rule, they should be fewer and made with more discrimination than hitherto. In every case, the presumption is against the acceptance of an applicant who has had gout, and the case must be proved to be suitable for an exception, after more than ordinary scrutiny and investigation. In this way the danger of loss will be reduced to a minimum. The cases which might form such exceptions cannot be defined, and each must be individually decided by the responsible Medical Adviser of the Company, but I think they should be limited to the following:

1. There should be an entire absence of hereditary tendency.
2. The first attack of gout shall not have appeared before 30 years of age.
3. The attacks shall have been very few in number,

and slight in character, and that several years shall have elapsed since the last attack.

4. That the person shall not have had gravel, frequent uric acid deposits in the urine, or symptoms of lithaemia.

5. The habits must be abstemious, both in eating and drinking, and the applicant must have given evidence that he appreciates the necessity for this course of life.

Respectfully submitted,

E. J. MARSH, M. D.

October 21, 1893.

NOTE.—At a recent meeting of the Life Assurance Medical Officers' Association, a paper on "Gout, and Life Risks" was read by Dr. J. Symes Thompson, and discussed by the other members of the Society. No new statistics were given, but the general tenor of opinion was in accordance with the views expressed in this report; the remarks and arguments dealing chiefly with the *amount* of impairment, and the increased rating that should be required. — *The Lancet*, Dec. 8, 1894, p. 1348.

